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**State Hydel Policy For Development Of  
Small Hydro Power Projects through  
Private Sector Participation**

**GOVERNMENT OF MAHARASHTRA  
WATER RESOURCES DEPARTMENT**

**Government Resolution No. PVT-1204/(160/2004)/ HP**

Mantralaya, Mumbai 400032

Dated: 15<sup>th</sup> September, 2005.

**I. PREAMBLE:**

Power is a critical infrastructure on which the socio-economic development of the country depends. The growth of the economy and its global competitiveness hinges on the availability of quality power at competitive rates. Therefore, it is imperative that electricity is made available at globally competitive cost.

The Government of Maharashtra (GoM) has laid maximum emphasis on the full development of its hydro potential being a clean & renewable source of energy. It has been therefore decided to encourage private sector participation in development of Small Hydro Projects (SHPs). Accordingly GoM declared policy vide Water Resources Department's (previously known as Irrigation Department's (ID)) G.R. No. HEP (7/2002)/HP, dated 28<sup>th</sup> November 2002. This policy is applicable to CPP through hydropower projects up to 25 MW installed capacity which is considered as one of the non-conventional energy source.

Electricity Act 2003 (EA 2003) has come into force since 10<sup>th</sup> June, 2003. This act has replaced the Indian Electricity Act 1910, the Electricity (Supply) Act 1948 and Electricity Regulatory Commissions Act, 1998.

The act has delicensed the generation and permitted direct commercial relationship between generating company and consumer/trader. The act has awarded generating company a right to open access to State Transmission Utilities (STU) for the purpose of wheeling electricity. The EA 2003 has also enlarged the definition of Captive user.

During the policy implementation process of GoM's policy dated 28.11.02 number of suggestions have been received requesting for certain amendments to the provisions in the state policy in light of provisions of EA 2003.

On this background and with an intention to harmonise the provisions in the state policy with that in EA 2003, GoM is pleased to declare revised policy for development of SHPs up to 25 MW capacity, through the private sector participation. This policy seeks to replace the earlier policy dated 28<sup>th</sup> November, 2002. The revised policy is intended to encourage the participation of both the Captive Power Producers (CPPs) and Independent Power Producers (IPPs) in development of SHP in the state.

## II. Objectives :

The objective of the policy is

- to harness the green power with the help of private sector..
- to create suitable environment for attracting private sector investment .&
- to lay down the framework for the implementation of the policy.

### Part A : Policy Guide Lines:

#### A-1 Scope:

The list of Identified SHPs (up to 25 MW) sites is available with Government of Maharashtra , Water Resources Department (GoMWRD). The same shall be updated from time to time. The projects from this list shall be offered for development as CPP/IPP. Unidentified SHP sites proposed by the developers for development of CPP/IPP shall also be governed by this policy.

For the purpose of this policy, Captive Power Plant (CPP) is defined as a SHP set up under section 9 read with clause (8) of section 2 of EA 2003 and compiling the requirements stipulated in Electricity Rules 2005 notified by Ministry of Power, Govt. of India (GoI) on 8<sup>th</sup> June, 2005.

For the purpose of this policy IPP is defined as SHP set by any person as defined in EA 2003 for generating electricity, which can be sold to any consumer located in the state of Maharashtra or any other willing distribution licensee or any Power Trading Company.

The provisions of this policy are also applicable for any governmental or semi-governmental organisation of GoM who owns the water reservoirs.

#### A-2 Operative Period:

The policy shall be in operation from the date of publication of this resolution till it is cancelled/revised. All the projects awarded within this period shall be governed by this policy.

The SHP allotted under this policy shall be on Build, Operate & Transfer Basis (BOT). The BOT period shall be 30 years. The BOT period shall start from the date of commissioning of the project. At the end of the BOT period the absolute ownership of the SHP along with land, switchyard & allied equipment shall automatically stand transferred to GoMWRD free of cost.

MERC has initiated the tariff determination process for SHPs. Tariff and other dispensation determined through this process may or may not apply for a period coterminous with BOT and/or lease period agreed to between the developer and GoMWRD.

GoMWRD may extend the BOT period at its discretion. If the period is extended GoMWRD reserves the right to review the charges specified in section A-14 of this policy.

### **A-3 The procedure for selection of Developers:**

The procedure for selection of developers shall be as under.

**A-3.1** The list of sites for SHPs to be offered for privatisation is available with GoMWRD. This list shall be displayed on the web site of GoMWRD and shall be updated from time to time. GoMWRD shall offer projects from this list for development through public notification. The bidding process shall be open to both CPP and IPP.

**A-3.2** Prequalification evaluation of the interested developers shall be done. The criteria for pre-qualification shall be technical & financial capabilities, past experience and other relevant attributes of the developer. The necessary information regarding attributes to be evaluated, their inter-se weightage, guidelines for evaluation, passing score on attributes required for pre-qualification shall be specified in pre-qualification document. Based on the above criteria the developers shall be pre-qualified.

**A-3.3** The bidding procedure shall be as under.

**A-3.3.1** Main bidding documents shall be issued only to pre-qualified developers. The minimum threshold premium shall be mentioned in the bidding document. The bidders shall quote a premium payable to GoM over and above threshold premium and support his bid by Earnest money Deposit (EMD). Upfront premium will be the primary consideration for allotment of the project. Upfront premium offered by both IPPs/CPGs will be evaluated. The highest bid so evaluated will be the criteria for selection.

**A-3.3.2** In most of the projects GoMWRD already constructed intake structure hosting trash rack & sluice gates. Reinforced concrete lined penstock is also laid in the body of the dam. GoMWRD intends to recover its exclusive investment on power component viz. trash rack and steel penstock by fixing the threshold premium for bidding. This threshold premium shall be Rs. 50 Lakhs/MW in case of SHPs in which GoMWRD has already made investment on trash rack and penstock. In other cases it shall be zero.

**A-3.4** The GoMWRD shall intimate developer regarding his selection and Letter of Permission (LoP) to the developer. This LoP will empower the developer to make necessary investigations and prepare Techno-Economic Feasibility Report (TEFR). The data available with GoMWRD if any shall be made available to the selected developer, free of cost. The Developer shall draw his own inferences from this data.

**A-3.5** If the developer comes forward with his own site for development of the project, GoMWRD shall issue LoP directly provided the proposed project is not already investigated by GoMWRD. Decision of Secretary (CAD), GoM in this regard shall be final.

### **A-4 Development of Project:**

**A-4.1** After receipt of the LoP the developers shall prepare Techno Economic Feasibility Report (TEFR). The TEFR shall be prepared considering the fact that the release of water shall be strictly as per irrigation/domestic/industrial demands and the generation

will have to be synchronised with these releases. GoMWRD reserves the right to release schedule and modify it from time to time as per the requirements. GoMWRD will make serious efforts to release maximum volume of water in such a manner that it can be used for generation of electricity at desired time. However, the decision of GoMWRD in this regard shall be final and binding. No claim of compensation on these grounds will be entertained.

If the developer is satisfied about the technical-economic viability of the project, he shall submit the TEFR to GoMWRD within three months from the date of LoP along with the processing fees as indicated hereinafter.

Sr. No.	Installed Capacity	Processing Fees in Rs. lakhs.
1.	Up to 999 kW	1
2.	1000 kW to 1999 kW	3.5
3.	2000 kW to 4999 kW	5
4.	5000 kW to 25000 kW	10

Under any circumstance (whether the project is viable or not) the developer is not entitled for any claim for reimbursement of expenditure that he has made on investigation, preparation of TEFR and its scrutiny.

**A-4.2** GoMWRD before concurring with TEFR shall ascertain whether or not in its opinion

**A-4.2.1** Proposed scheme will jeopardise the project for small scale development of the hydro potential of the site consistent with the requirements of domestic/Irrigation/Industrial water, navigation, flood control or other public purposes.

**A-4.2.2** Proposed company exploits the full potential of the site allotted to the developer. In normal situation development in stages will not be allowed. However, due to any specific reasons if stage wise development of the project is necessary, Secretary (CMD) is authorised to allow stage wise development.

**A-4.2.3** Proposed scheme meets the norms regarding dam design & safety.

**A-4.3** If the TEFR satisfies all the above prerequisites GoMWRD shall approve the same and issue Letter of Allotment (LoA) within one month from the date of submission of TEFR and date of giving all the clarifications by developer, whichever is later. On receipt of LoA developer shall deposit the Performance Security and sign the Hydro Power Development Agreement (HPDA) with GoMWRD within eight days. Amount of Security deposit shall be such that yearly charges payable to GoMWRD on account of water royalty, maintenance charges and land lease charges could be recovered from it.

**A-4.4:** Developer shall arrange for all the necessary clearances & financial closure within three months from the date of signing HPDA. GoMWRD shall facilitate developer in getting clearances. However, it shall be the primary responsibility of developer to arrange various clearances within stipulated time. This period shall be extended if there are

reasons for such extension, which shall be decided by Secretary (CD), GoM. Failure of developer in arranging the various clearances & finance within a stipulated period will result into automatic cancellation of HPDA and forfeiture of Performance Security. In case, any of the state level or central level clearance is denied for a justifiable reason the performance Security shall be refunded to the developer. However, cost incurred by developer for investigations, preparing TEFR, getting clearances and arranging finance shall not be refunded in any case.

**A-4.5:** After getting necessary clearances & financial closure within stipulated period & submitting the documentary proof thereof GoMWRD shall issue letter to the developer (within 8 days) to deposit the amount of Upfront Premium offered by him within one month.

Failure of developer to deposit amount of Upfront Premium within stipulated period will result into automatic cancellation of HPDA and forfeiture of Performance Security. GoMWRD shall authorise the developer to start the development work within 8 days from payment of amount of Upfront Premium.

**A-4.6** In case of surrender of allotment by developer due to any reason he will be penalised as under and no compensation would be payable to the developer in such instance...

Sr. No.	Stage at which project is surrendered	Penalty
1.	Before signing HPDA	Forfeiture of Earnest Money Deposit except in the event the project is found unviable
2.	After signing HPDA	Forfeiture of Performance Security except when any state/central level clearances are denied.
3.	After permission for development is given	Forfeiture of Performance Security plus amount of Upfront Premium.

**A-4.7** The project shall be made operational within 24 months from the date of authorisation for development. However, any project specific issues shall be considered and project implementation schedule shall be drafted accordingly and incorporated in HPDA. The land under the possession of the government will be handed over to the developer on lease rent. If no government land is available for setting the unit, the developer has to arrange for land acquisition from private parties at his cost.

**A-4.8:** During the project implementation the progress of the developer shall be reviewed at various milestones & if the progress is not found satisfactory reasons for the delay shall be called for. If the reasons for the delay are found to be beyond the control of the developer, necessary time extension shall be given otherwise developer would be liable to pay a penalty as decided by GoMWRD. The details regarding various milestones and rate of penalty shall be included in the HPDA.

**A-4.9** The developer shall be responsible for carrying out the work with due diligence with regard to his responsibilities under various Central/ State / Local laws, rules and regulations & ensure the compliance of the same.

**A-4.10** The developer shall insure the assets of the project and keep them insured during the term of HPDA.

**A-5 Consultancy:**

In case, the developer opt to utilise the Consultancy services of GoMWRD in respect of further investigations, preparation of TEFR, estimates, designs & drafting specifications etc. he can avail the same at mutually agreed rates & conditions. GoMWRD has ISO 9001-2000 recognized design organization which has expertise in this field.

**A-6 Generation:**

Developer can establish, operate & maintain a generating power plant without any license, subject to following requirements.

**A-6.1** TEFR is approved by GoMWRD.

**A-6.2** All the Statutory Clearances are received.

**A-6.3** Technical standards relating to connectivity with the grid referred to in clause (b) of Section 73, provisions in section 10 and other applicable provisions of EA 2003 are followed.

**A-7 Grid Interfacing & Evacuation Arrangements:**

This will be as per dispensation emerging from the tariff and procurement process determination exercise initiated by MERC.

**A-8 Transmission/Distribution entities:**

Developer may construct and maintain dedicated transmission lines as defined in EA, 2003 from the generation plant to the destination of his use. However, he will have the right to access for existing transmission facilities in the State as per the provisions of EA, 2003 and the Regulations and other dispensations of MERC regarding Transmission Open Access. The local distribution licensee shall be permitted to evacuate power from SHP directly if he desires to do so. The developer shall sign Energy wheeling agreement with Transmission entity / distribution licensee. When transmission lines of Transmission entities are used, rates of wheeling charges and transmission losses shall be as decided by MERC from time to time, and wheeling transactions shall be settled accordingly.

When an open access is provided by MERC under subsection (2) of section 42 of Electricity Act 2003 the developer shall be responsible for payment of transmission charges & surcharge thereon as decided by MERC for the energy sold to Third Party Consumer/Distribution Licensee/Power Trading Company.

The metering of energy generated at generating station and corresponding credit at the consumption point shall be on ToD (Time of Day) tariff slots.

#### **A-9 Banking :**

This will be as per dispensation emerging from the tariff and procurement process determination exercise initiated by MERC.

#### **A-10 Generation Restrictions:**

In extraordinary circumstances arising out of threat to security of the state, public order or a natural calamity or such circumstances arising out of public interest, the developer shall have to operate & maintain generating station in accordance with the directives of state government subject to the provisions of section 11 of EA, 2003.

#### **A-11 No Compensation for Grid Failure:**

Developer/ Third party consumer/ Captive user/ Licensee (authorised consumer) shall abide by grid discipline & will not be entitled for any compensation in the event of grid failure, shut down, interruption in power supply etc.

#### **A-12 Developers to Pay to GoMWRD:**

**A-12.1 Water royalty :** Developer shall pay the water royalty at the rate of Rs.0.05 per unit of energy generated .

**A-12.2 Charges for maintenance of Intake structure, penstock etc. at the rate of Rs 0.05 for every unit generated.**

**A-12.3 Land lease charges for the GoMWRD land at the rate of Rs.1/kW of installed capacity/ Year.**

**A-12.4** The above rates of royalty charges, maintenance charges and lease charges are for the first year and the same shall be increased in every subsequent years by 5% by compounding.

**A-12.5** The above rates of royalty charges , maintenance charges and lease charges shall be reviewed after 30 years if lease period is extended.

**A-12.6** Water royalty charges and maintenance charges shall be invoiced quarterly at the end of each quarter and land lease charges shall be invoiced at the beginning of every financial year. All these charges will have to be settled within 30 days after the receipt of the invoice. Thereafter the interest at S.B.I. prime lending rate plus 2% (Two percent) per annum on delayed payment for delayed period shall be made applicable.

**A-12.7** During first 10 years after commissioning, If in any particular year, 75% of the 75% dependable water could not be made available to the developer, then water royalty charges and maintenance charges for that year shall be waived off.

#### **A-13 Taxes & Duties:**

The developer shall pay taxes, duties & other levies as applicable from time to the respective departments of the State & Central and Local Governments unless he are specifically exempted from paying such taxes & duties. It will be presumed developer has considered all these aspects before bidding.

However, to encourage and promote sale of available surplus captive power of the state and to avoid undue overburden on CPP with reference of Electricity Duty, Maharashtra exempt CPPs under this policy from Electricity Duty and Tax on Electricity.

#### **A-14 Transfer of Allotment:**

If the developer wants to transfer ownership of generating unit to another developer he will be permitted to do so on prior approval of GoMWRD. GoMWRD such approval provided,

**A-14.1** Financial institution has consented such transfer.

**A-14.2** GoMWRD is satisfied that the new developer shall consume the generated power primarily for his own use ( in case of CPP only).

**A-14.3** Proposed developer agrees to all the terms & conditions agreed to by developer.

**A-14.4** And new developer deposits the transfer fees with GoMWRD as RS. 1000/- of installation. This transfer fee may vary as per prevailing Whole Sale Price Index of 2003-04. This transfer fees are in addition to transfer fees payable by authority.

#### **A-15 Sale of Power:**

Generated electricity can be sold to any consumer locate in the state of Maharashtra willing distribution licensee or any power trading company. However, Maharashtra Distribution Company shall have the first right of refusal. Sale of power is dispensation emerging from the tariff and procurement process determined initiated by MERC.

#### **A-16 Inspection of Project:**

The GoMWRD engineers before and after the monsoon shall inspect the project from safety point of view. The developer shall render all required operation for such inspection. Similarly, statutory inspection for

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Electrical Inspector shall be got done. The Inspection Reports shall be furnished to GoMWRD annually.

Developer shall maintain all the record regarding capacity, generation, PLF, downtime with relevant constraints etc. and make available all these records to inspecting authority for inspection.

#### **A-17 Exclusive Jurisdiction Of MERC:**

MERC has exclusive jurisdiction on those provisions of this Policy which are within its regulatory mandate under the provision of Electricity Act, 2003, especially regarding electricity sales rates, power purchase agreements and provisions regarding wheeling, banking distribution and transmission loss charges etc. Similarly, MERC has jurisdiction as per the provisions of EA 2003 as regards the promotion of non-conventional energy sources, facilities for transmission of energy, sale of power to any interested consumer and sharing of purchase of power amongst the STU/Transmission Licensee/Distribution Licensee. Orders regulations, directives, guidelines issued by MERC regarding these issues from time to time shall be binding on all.

In the event of dispute in interpretation of this policy or any clause in the agreement between developer & GoMWRD or STU/Transmission Licensee/Distribution Licensee, the same shall be referred to MERC to the extent of its jurisdiction under section 86(1) and other provisions of EA. 2003.

#### **A-18 : Obligations of GoMWRD:**

**A-18.1:** Nodal officer of GoMWRD shall extend all the possible assistance for getting the various clearances required.

**A-18.2:** GoMWRD shall approve the TEFR within 1 month from the date of submission or date of giving all the clarifications by developer whichever is later.

**A-18.3:** GoMWRD shall hand over the site for development of the project within 15 days from the permission accorded to commence the work.

**A-18.4:** Developer shall be allowed to use the approach road to the power house if it is in possession of GoMWRD . However, the developer at his own cost shall carry out the maintenance of the same.

**A-18.5:** GoMWRD shall provide residential quarters of suitable type, if and as available near the project site for developer for his staff during construction period on rental basis. However, the developer at his own cost shall carry out the maintenance of the same.

**A-18.6:** GoMWRD shall make available the piece(s) of land if available to developer for construction of residential quarters/office of maintenance staff on terms to be agreed between GoMWRD & developer. The period of such agreement shall be the same as that of HPDA. In such case the developer shall handover such buildings to GoMWRD at the end of the agreement free of cost. However, the developer shall not be allowed to make any commercial use of such land.

**Part-B General Provisions:**

**B-1:** The developers to whom CPP is allotted by GoMWRD under previous policy & who wish to opt for the provisions of this policy may apply for the same alongwith the necessary processing fee. GoMWRD shall accord such permission if requisite requirements are confirmed by the developer. The processing fees for this purpose shall be of Rs. One lakh per unit installation. This processing fee may vary as per prevailing Whole Sale Price Index with effect from index of 2003-04. However, this permission of GoMWRD shall be subjected to provisions of Section A-17 of this policy and dispensation emerging from the tariff and procurement process determination exercise initiated by MERC.

**B-2:** IPPs & CPPs are free to change their option (entity) in due course of time. However, this permission shall be subjected to provisions of Section A-17 of this policy and dispensation emerging from the tariff and procurement process determination exercise initiated by MERC.

**B-3:** Change in option from sale to third party to Licensee and vice versa and sale from one third party consumer to other third party consumer without change in entity shall also be governed by provisions of Section A-17 of this policy and dispensation emerging from the tariff and procurement process determination exercise initiated by MERC.

**B-4:** Provisions in the Policy shall be periodically reviewed in view of the economic development of the sector. In normal circumstances next review shall be after three years. However, GoM reserves the right to amend / delete certain provisions of this policy if found necessary for operational ease or to include additional provisions, if found necessary for operational ease or to deal with unforeseen issues or if found necessary due to any further dispensation of GoI or as the case may be. GoM may from time to time issue orders and practice directions relating to the implementation of this policy and matters incidental or ancillary thereto as GoM may consider appropriate. However, such amendments shall be made applicable with prospective effects only.

**Part-C : Promotional Incentives Offered by GoM**

SHPs are the renewable non-polluting energy sources. However, like any other conventional source they are costlier as compared to conventional sources. With a

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to make available energy from these sources at competitive rates Ministry of Non-conventional Energy Sources (MNES) GoI has offered some incentive schemes. On the same lines GoM is pleased to offer following incentives.

**C-1** The developer is supposed to commission the project within 24 months from the date of authorisation. If the developer commissions the project at earlier date, he will be exempted from water royalty charges & maintenance charges to an extent of units generated before scheduled date of commissioning.

**C-2** CPPs shall be exempted from Electricity Duty on the self consumption of electricity only for first five years after commissioning if the consumption unit is located in Maharashtra.

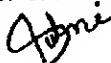
**C-3** CPPs shall be exempted from tax on Sale of Electricity only if the consumption unit is located in Maharashtra.

**C-4** Technical Consultancy at nominal charges.

**C-5** Maharashtra Energy Development Agency (MEDA), Pune shall assist the developers in getting incentives for SHPs from MNES, GoI.

This resolution is issued in concurrence of Finance, Energy, Planning and Industry Departments. This resolution is being in supersession of Irrigation Department's GR No. HEP (118/99) HP, dated 22nd September 1999 and G.R. No. HEP (7/2002) HP dt. 28<sup>th</sup> November, 2002.

By order and in the name of the Governor of Maharashtra,

  
(V.M. Kulkarni )  
Deputy Secretary to Government of Maharashtra

Copy to:

The P.S. to Hon. Chief Minister, Maharashtra State, Mumbai  
The P.S. to Hon. Dy. Chief Minister, Maharashtra State, Mumbai  
The P.S. to Hon. All Ministers, Maharashtra State, Mumbai  
The P.S. to Hon. All State Ministers, Maharashtra State, Mumbai  
The Chief Secretary, Maharashtra State, Mumbai-400 032  
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The Secretary (Water Resources), Water Resources Department, Mantralaya, Mumbai  
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The Mg. Director, MSEB Holding Company Ltd., Prakashgad, Mumbai-400 051.  
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